

1. (Currently Amended) A gearbox, comprising:
a sealed housing for receiving a lubricant;
a first rotational shaft ~~provided in~~ extending through a shoulder of the housing;
a gear ~~drive~~ coupled to the rotational shaft below the shoulder to rotate the shaft;
a first bearing journaling the first rotational shaft at a distance above the gear drive; and
at least one channel opening radially to the shaft provided in the shoulder ~~housing~~ and
extending to the bearing, a ~~bottom~~ lower portion of the channel being positioned above and
adjacent the gear ~~drive~~ shoulder to receive lubricating fluid rotated by the gear ~~drive~~;
wherein, as the gear rotates, rotating lubricants pass into the channel and are ~~carried by~~
momentum propelled to the first bearing for lubrication of the first bearing.
2. (Original) The gearbox as defined in claim 1, further comprising a recess
provided at the bottom end of the channel, the recess being enlarged relative to the channel to
capture rotating fluids.
3. (Currently Amended) The gearbox as defined in claim 1, wherein the channel
extends from an upper end of the gear to a lower end of the first bearing further comprising a
shoulder extending radially inward toward the rotational shaft from a wall of the housing.
4. (Currently Amended) The gearbox as defined in claim ~~1~~ 3, wherein the distance
between ~~the an~~ inner diameter of the shoulder and ~~an~~ the outer diameter of the rotational shaft is
selected to be sufficiently small that the viscosity of the lubricant restricts the opening between
the inner diameter of the shoulder and the outer diameter of the rotational shaft to provide a
resistance to the flow of fluid.
5. (Currently Amended) The gearbox as defined in claim 1, further comprising a
second bearing positioned on the first rotational shaft nearer the gear ~~drive~~ than the first bearing,
the channel extending past the second bearing to the first bearing and opening radially to the
second bearing.
6. (Currently Amended) The gearbox as defined in claim 1, further comprising a
second rotational shaft provided in the housing, the second rotational shaft being positioned at an
angle to the first rotational shaft and coupled to the rotational shaft through the gear ~~drive~~.
7. (Currently Amended) The gearbox as defined in claim 1, wherein the gearbox
comprises a plurality of channels, each of the channels being spaced substantially equidistantly
around a circumference of the housing surrounding the first rotational shaft.
8. (Original) The gearbox as defined in claim 6, wherein the housing comprises an
upper section and a lower section, the upper section enclosing the first rotational shaft and the
lower section enclosing the second rotational shaft.
9. (Original) The gearbox as defined in claim 8, wherein the upper section is a split
case comprising a first and a second half.

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10. (Currently Amended) A gearbox, comprising:
a sealed housing;
a substantially vertical shaft ~~provided in~~ extending through a shoulder of the housing;
an upper bearing and a lower bearing journaling the shaft;
a gear drive coupled to the shaft;
a lubricant provided in the housing for lubricating the gear drive;
a shoulder positioned between the upper and lower bearings and having an extending
~~radially inward from an internal diameter of the housing toward the shaft, the internal diameter~~
~~of the shoulder being~~ selected such that the viscosity of the lubricant restricts an opening
between the shoulder and the ~~input~~ outer diameter of the shaft; and
~~a~~ at least one channel opening radially to the shaft provided in the housing shoulder and
extending axially from the gear drive past the first lower bearing and the shoulder to the upper
bearing;
wherein as the gear drive rotates, the rotation causes the lubricant to be ~~circulated~~
propelled through the channel to lubricate the upper bearing.
11. (Original) The gearbox as defined in claim 10, further comprising a second shaft
provided in the housing, the second shaft being positioned at an angle of substantially ninety
degrees to the substantially vertical shaft.
12. (Original) The gearbox as defined in claim 10, further comprising a plurality of
channels.
13. (Currently Amended) The gearbox as defined in claim 10, wherein a recess
having a diameter greater than a diameter of the channel is provided at an end of the at least one
channel adjacent the gear train.
14. (Currently Amended) The gearbox as defined in claim 10, wherein the channel
angles from a wide point adjacent the gear train to a narrow point adjacent the upper bearing.
15. (Original) The gearbox as defined in claim 10, wherein the housing comprises an
upper portion and a lower portion.
16. (Original) The gearbox as defined in claim 15, wherein the channel is provided in
the upper portion.
17. The gearbox as defined in claim 16, further comprising a plurality of channels
wherein the upper portion includes a first half and a second half, each of the first and second
halves including at least one of the plurality of channels a channel, a first half of a second of the
plurality of channels, and a second half of a third of the plurality of channels.
18. (Withdrawn) A method for lubricating a bearing on a substantially vertical shaft
in a vertically configured right angle gear box including a housing with a quill surrounding the
substantially vertical shaft using a lubricant from the gear box, the method comprising:
providing a channel in the quill adjacent the vertical shaft

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minimizing a distance between the vertical shaft and the quill such that a viscosity of the lubricant restricts the flow of fluids between the vertical shaft and the housing and fluids are therefore directed through the channel;

positioning an open bottom end of the channel adjacent a source of lubricating fluid; and rotating the gears in the gearbox, causing the lubricating fluid to move into the channel to lubricate the bearing.

19. (Withdrawn) The method as defined in claim 18, further comprising providing an enlarged recess around the open bottom end, the enlarged recess capturing the rotating fluids.

20. (Withdrawn) The method as defined in claim 18, further providing the step of providing a plurality of channels spaced equidistantly around the quill.